

CTAHR BIO-Bibliography

Mark G. Wright

University of Hawai'i at Mānoa
College of Tropical Agriculture and Human Resources
Department of Plant and Environmental Protection Sciences
FTE Distribution: 30% I; 45% R; 25% E

Education

<u>University</u>	<u>Major</u>	<u>Year Graduated</u>
University of Stellenbosch	B.Sc. Hons.	1987
University of Stellenbosch	M.Sc.	1990
University of Natal	Ph.D.	1996

Professional Appointments

<u>Title</u>	<u>Employer</u>	<u>Dates Employed</u>
Professor/Extension specialist	University of Hawaii at Manoa	2012-present
Associate professor/Extension Specialist	University of Hawaii at Manoa	2007-2012
Assistant professor/Extension Specialist	University of Hawaii at Manoa	2001-2007
Research associate II	Cornell University	2000-2001
Post-doctoral associate	Cornell University	1999-2000
Research entomologist	Agricultural Research Council	1992-1999
Assistant agricultural researcher	Department of Agricultural Development	1988-1992

Courses Taught

<u>Course ID</u>	<u>Credits</u>	<u>Semester/Year</u>	<u>No of Students</u>
PEPS675	3	F2024	9
PEPS422/SUST422	3	S2023	6
PEPS491 (Study abroad)	3-6	S2023	8
PEPS421 (team)	4	Sp2023	12
PEPS671	3	F2022	6
PEPS491 (study abroad)	3-6	S2022	6
PEPS421 (team)	4	Sp2021	12
PEPS422/SUST422	3	S2022	9
PEPS675	3	F2022	8
PEPS421 (team)	4	Sp2021	9
PEPS422/SUST422	3	S2021	6
PEPS491 (study abroad)	3-6	S2021	6
PEPS675	3	F2021	6
PEPS671	3	F 2020	10
PEPS422/SUST422	3	S 2020	8
PEPS421 (team)	4	Sp2020	12

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Publications (past five years)

Book chapters, Conference Proceedings

1. Kaufman, L.V., **Wright, M.G.** 2022. Erythrina gall wasp successfully controlled by the introduction of a parasitoid wasp in Hawaii. In: Contributions of classical biocontrol to the US food security, forestry and biodiversity. Eds van Driesche, RG, Winston, RL, Perring, TM, Lopez, VM. USDA Forest Service, FHAAST-2019-05. pp. 367-372.
2. Cave, R., Moore, A., **Wright, M.G.** 2022. Biological Control of the Cycad Aulacaspis Scale, *Aulacaspis yasumatsui*. In: Contributions of classical biocontrol to the US food security, forestry and biodiversity. Eds van Driesche *et al.* USDA Forest Service, FHAAST-2019-05189-203. pp. 189-203.
3. Mafra-Neto, A., **Wright, M.**, Fettig, C., Progar, R., Munson, S., Blackford, D., Moan, J., Graham, E., Foote, G., Borges, R., Silva, R., lake, R., Bernardi, C., Saroli, J., Clarke, S., Meeker, J., Nowak, J., Agnello, A., Martini, X., Rivera, M., Stelinski, L. 2021. Repellent semiochemical solutions to mitigate the impacts of global climate change on arthropod pests. In: *Advances in Arthropod Repellents*. Elsevier. pp. 279-322.
4. Day, M., Cock, M., Conant, P., Furlong, M., Paynter, Q., Ramadan, M., **Wright, M.G.** 2021. 14-Biological control success and failures: Oceania region. In: *Biological Control: Global Impacts, Challenges and Future Directions of Pest Management*, Ed. P.G. Mason. CSIRO Publishing, Melbourne. pp. 342-376.
5. **Wright, M.G.** 2017. Assessing host use and population level impacts on non-target species by introduced natural enemies: can host range testing provide insight? Proceedings of the 5th International Symposium on Biological Control of Arthropods. Malaysia. P.G. Mason, D.R. Gillespie and C. Vincent (Eds.). CAB International. 50-51.

Refereed Journal Publications

1. **Wright, M.G.**, Gatti, I., Au, M.G., Salehi, J., Spencer, C.R., Allin, P., Mafra-Neto, A. 2023. Evaluating formic acid as a behavioral modifier in African savanna elephants. *Diversity* 15, 1079. <https://doi.org/10.3390/d15101079>
2. Nagamine, W.T.; Yalamar, J.A.; **Wright, M.G.**; Ramadan, M.M. 2023. Reproductive parameters and host specificity of *Eurytoma erythrinae* (Hymenoptera: Eurytomidae), a biological control agent of the erythrina gall wasp, *Quadrastichus erythrinae* (Hymenoptera: Eulophidae). *Insects* 14, 923. <https://doi.org/10.3390/insects14120923>
3. Wilson, S., Thorne, M., **Wright, M.G.**, Peck, D., Mack, J., Fukumoto, G., Curtiss, R. 2023. The twolined spittlebug (Hemiptera: Cercopidae: *Prosapia bicincta*) invades Hawai'i: establishment, biology, and management of a destructive forage grass pest. *Journal of Integrated Pest management* 14: 1-13. <https://doi.org/10.1093/jipm/pmad023>
4. Aristizabal, L.F., Johnson, M.A., Marino, Y.A., Bayman, P., **Wright, M.G.** 2023. Establishing an integrated pest management program for coffee berry borer (*Hypothenemus hampei*) in Hawaii and Puerto Rico coffee agroecosystems: achievements and challenges. *Insects* 14(7), 603. <https://doi.org/10.3390/insects14070603>
5. Ramadan, M.M., Kaufman, L.V., **Wright, M.G.** 2023. Recent advances in insect and weed biocontrol in Hawaii: case studies and trends. *Biological Control* 179: 105170.
6. Au, M.G. and **Wright, M.G.** 2022. *Arcte coerulea* (Lepidoptera: Noctuidae): A new invasive pest in Hawai'i on endemic plants. *Proceedings of the Hawaiian Entomological Society* 54: 63-75.
7. Honsberger, D.N., Huber, J.T. and **Wright, M.G.** 2022. A new *Mymaromma* sp. (Mymarommatoidea, Mymarommataidae) in Hawai'i and first host record for the superfamily. *Journal of Hymenoptera Research* 89: 73-87. <https://doi.org/10.3897/jhr.89.77931>
8. Honsberger, D.N., **Wright, M.G.** 2022. A new species of *Phymastichus* (Hymenoptera: Eulophidae: Tetrastichinae) parasitic on *Xyleborus* beetles (Coleoptera: Curculionidae: Scolytinae) in Hawaii. *Zootaxa* 5116: 107-122.
9. Elliot, C., Gillett, C.P.D.T., Parsons, E., **Wright, M.G.** and Rubinoff, D. Identifying key threats to a refugial population of an endangered Hawaiian moth. *Insect Conservation and Diversity* doi: 10.1111/icad.12553
10. Gugliuzzo, A., Biedermann, P.H.W., Carrillo, D., Castrillo, L.A., Egonyu, J.P., Gallego, D., Haddi, K., Hulcr, J., Jactel, H., Kajimura, H., Kamata, N., Meurisse, N., Li, Y., Oliver, J.B., Ranger, C.M., Rassati, D.,

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- Stelinski, L.L., Sutherland, R., Garzia, G.T., **Wright, M.G.**, and Biondi, A. 2021. Recent advances toward the sustainable management of invasive *Xylosandrus ambrosia* beetles. *Journal of Pest Science* <https://doi.org/10.1007/s10340-021-01382-3>
11. Le Roux, J.J., Crous, P.W., Kamutando, C.N., Richardson, D.M., Strasberg, D., Wingfield, M.J., **Wright, M.G.**, and Valverde, A. 2021. A core of rhizosphere bacterial taxa associate with two of the world's most isolated plant congeners. *Plant and Soil* <https://doi.org/10.1007/s11104-021-05049-x>
 12. Yousuf, F., Follett, P.A., Gillett, C.P.D.T., Honsberger, D., Chamorro, L., Johnson, T.M., Jaramillo, M.G., Machado, P.B. & **Wright, M.G.** 2021. Limited host range in the idiobiont parasitoid *Phymastichus coffea*, a prospective biological control agent of the coffee pest *Hypothenemus hampei* in Hawaii. *Journal of Pest Science* <https://doi.org/10.1007/s11104-021-05049-x>
 13. Ali, A.N., & **Wright, M.G.** Response of *Trichogramma papilionis* to semiochemicals induced by host oviposition on plants. *Biological Control* (In press).
 14. Gutierrez-Coarite, R., Cho, A.H., Mollenido, J., Pulakkatu-Thodi, I., & **Wright, M.G.** 2021. Macadamia felted coccid impact on macadamia nut yield in the absence of a specialized natural enemy, and economic injury levels. *Crop Protection* 139: 105378.
 15. Kaufman, L.V., Zarders, D.R., & **Wright, M.G.** 2020. Susceptibility of endemic *Myoporum* (Naio) species and populations to *Klambothrips myopri* (naio thrips) in Hawaii. *Pacific Science* 74: In press.
 16. Rugman-Jones, P.F., Au, M., Ebrahimi, V., Eskalen, A., Gillett, C.P.D.T., Honsberger, D., Husein, D., **Wright, M.G.**, Yousuf, F., & Stouthamer, R. 2020. One becomes two: second species of the *Euwallacea fornicatus* complex (Coleoptera: Curculionidae: Scolytinae) species complex is established on two Hawaiian Islands. *PeerJ Life and Environment* 8:e9987 <http://doi.org/10.7717/peerj.9987>
 17. Ali, A.N., & **Wright, M.G.** 2020. Fitness effects of founder female number of *Trichogramma papilionis* reared on *Ephestia kuehniella*. *Proceedings of the Hawaiian Entomological Society* 52: 25-34.
 18. Ali, A.N., & **Wright, M.G.** 2020. Behavioral response of *Trichogramma papilionis* to host eggs, host plants, and induced volatile plant cues. *Biological Control* 149: 104323.
 19. Kaufman, L.V., Yalamar, J., & **Wright, M.G.** 2020. Classical biological control of the erythrina gall wasp, *Quadrastichus erythrinae*, in Hawaii: conserving an endangered habitat. *Biological Control* 142: 104161.
 20. **Wright, M.G.** 2019. Cover crops, conservation biocontrol and augmentative releases – can *Trichogramma* impacts be magnified? *Annals of the Entomological Society of America* 112: 295-297.
 21. Guitierrez, R., Pulakkatu-thodi, I., & **Wright, M.G.** 2019. Binomial Sequential Sampling Plan for Macadamia Felted Coccid, *Eriococcus ironsidei* (Hemiptera: Eriococcidae) Infesting Hawaii Macadamia Orchards. *Environmental Entomology* 48: 219-226.

Extension Publications

1. Gutierrez-Coarite, R., Kawabata, A., Cho, A., Mollinedo, J., **Wright, M.G.** 2020. Macadamia nut orchard modification strategies for reducing macadamia felted coccid (*Eriococcus ironsidei*) populations in Hawaii. CTAHR CES IP-48. pp.1-8.
2. Wright, M.G. 2020. Avocado lace bug in Hawaii. CTAHR CES IP-50. pp. 1-2.
3. Thorne, M., Wilson, S., Wright, M., Peck, D. 2022. Twolined spittlebug identification key. CTAHR CES IP-52; PRM-123. pp. 1-5.

Graduate Students (Most recent year only)

<u>Category</u>	<u>Number of Students</u>	<u>Number that Graduated</u>
Chair of Master Committees	4	3
Chair of PhD Committees	4	0
Member of Master Committees	1	1

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Member of PhD Committees

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GRANTS AWARDED: Total: \$3,485,174

Award Fiscal Year	Title	Award Sponsor	Award Amount
2023	UH Systems Approach for management of coffee berry borer	USDA APHIS	\$49,650
2023	Pacific Southwest Regional Center of Excellence in Vector-Borne Diseases	UCD / CDC	\$25,000
2023	Conservation of Green Lacewings in Avocado Groves to Suppress Avocado Lace Bug Populations	Hawaii Dept. Agriculture	\$40,000
2023	Detection and Management Strategies for the Control of Prosapia bicincta (Twolined Spittlebug) in Hawaii	Hawaii Invasive Species Council	\$167,700
2023	Systems Approach for the Management of Coffee Berry Borer in Hawaii and Puerto Rico with Emphasis on Biological Control (UH-Manoa)	USDA-APHIS	\$75,000
2023	Improving Trapping Efficacy for Mosquito and Honeybee Detection and Monitoring in Hawaii	DLNR	\$57,746
2023	IPM implementation in Hawaii	USDA-NIFA	\$58,000
2022	Hawaii statewide implementation of pest management information	USDA-NIFA	\$58,410
2022	Detection & Invasive Potential and population dynamics of Arcte coerula	LAND & NATURAL RES, DPT-INVASIVE SPEC (DLNR)	\$13,745
2022	Detection and Management Strategies for the Control of Prosapia Bicincta (Twolined Spittlebug) in Hawaii	LAND & NATURAL RES, DPT-INVASIVE SPEC (DLNR)	\$184,788
2021	Biological Control of Schinus terebinthfolia	DLNR	\$42,378
2020	Integrated Pest Management for Macadamia	AGRICULTURE, DEPT-HI	\$42,109.00
2018	Phytosanitary Irradiation Treatments and Equipment	AGRICULTURE, DEPT-AGRI RSCH SVC-FED	\$20,000.00
2020	Prosapia bicincta (Two Lined Spittle Bug) Detection and Control in Hawaii	AGRICULTURE, DEPT-HI	\$333,086.00
2019	Classical Biological Control of Coffee Berry Borer	AGRICULTURE, DEPT-AGRI RSCH SVC-FED	\$120,000.00
2020	UH Systems Approach for the Management of CBB	Agriculture, Dept - Animal and Plant Health Inspection Service	\$115,000.00
2018	Prosapia bicincta (Two Lined Spittle Bug) Detection and Control in Hawaii	AGRICULTURE, DEPT-HI	\$300,000.00
2018	Detection and Control of Prosapia bicincta (Two Lined Spittle Bug) in Hawaii	LAND & NATURAL RES, DPT-INVASIVE SPEC (DLNR)	\$50,000.00
2018	IPM Extension and Implementation, Hawaii.	AGRICULTURE, DEPT-NATL INS FOOD AND AGRICULTURE	\$94,500.00
2017	Classical and Augmentative Biological Control for Coffee Berry Borer in Hawaii	AGRICULTURE, DEPT-HI	\$118,800.00
2021	Biological Control of Schinus terebinthfolia: Assessment of Biocontrol Agents and Potential Impacts on Apis mellifera	LAND & NATURAL RES, DPT-FORST (DLNR)	\$42,378.00

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2020	Detection and Invasive Potential of <i>Arcte Coerula</i> (Lepidoptera, Noctuidae), a New Potential Pest of Mamaki in Hawaii	LAND & NATURAL RES, DPT-INVASIVE SPEC (DLNR)	\$15,378.00
2018	FY17 Systems Approach for the Management of CBB	Agriculture, Dept - Animal and Plant Health Inspection Service	\$300,000.00
2021	Improving Trapping Efficacy for Mosquito Detection and Monitoring in Hawaii	Hawaii Invasive Species Council	\$48,913.00
2018	HI 17 - PD: Hala Scale	Agriculture, Dept - Animal and Plant Health Inspection Service	\$24,382.00
2022	Hawaii Statewide Implementation of Pest Management Information through Extension Activities	AGRICULTURE, DEPT-NATL INS FOOD AND AGRICULTURE	\$58,410.00
2021	<i>Prosapia bicincta</i> (Two Lined Spittle Bug) Detection and Control in Hawaii	AGRICULTURE, DEPT-HI	\$340,903.00
2020	Conditioning Parasitoids to Exploit Coffee Berry Borer, <i>Hypothenemus hampei</i>	AGRICULTURE, DEPT-HI	\$46,000.00
2020	Systems Approach for the Management of Coffee Berry Borer	Agriculture, Dept - Animal and Plant Health Inspection Service	\$46,345.00
2021	IPM Extension and Implementation, Hawaii.	AGRICULTURE, DEPT-NATL INS FOOD AND AGRICULTURE	\$32,000.00
2019	Systems Approach for the Management of CBB	Agriculture, Dept - Animal and Plant Health Inspection Service	\$120,000.00
2018	Management of Coffee Berry Borer Using Non-Toxic Fruit Coating	Crop Enhancement, Inc.	\$3,000.00
2018	Area-wide IPM for Coffee Berry Borer Control under Variable Landscapes in Hawaii's Coffee Growing Regions	AGRICULTURE, DEPT-AGRI RSCH SVC-FED	\$493,730.00
2018	<i>Prosapia bicincta</i> (Two Lined Spittle Bug) Detection and Control	BIG ISLAND RESOURCE CONSERVATION & DEV COUNCIL INC.	\$22,473.00

Presentations at Conferences (*Presenter)

Title: Parasitoids of nonnative Scolytinae in Hawai'i

Authors: *Honsberger, D., Wright, M.G.

Name of conference: Pacific Entomology Conference.

Date of Presentation: December 2023.

Title: Biotic resistance and invasive insects in Hawai'i

Authors: *Wright, M.G., Au, M.G., Honsberger, D.

Name of conference: Pacific Entomology Conference.

Date of Presentation: December 2023.

Title: Factors influencing establishment success of insect and weed biological control introductions in Hawai'i

Authors: *Au, M.G., Matsunaga, J.N., Wright, M.G.

Name of conference: Pacific Entomology Conference.

Date of Presentation: December 2023.

Title: New invasive insect species in Hawaii, classical biological control and resident biotic resistance.

Authors: *Wright, M.G., Au, M., Honsberger, D.

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Name of conference: Entomological Society of America/Entomological Society of Canada joint meeting.

Date of Presentation: November 2022.

Title: New invasive insect species in Hawaii, classical biological control and resident biotic resistance.

Authors: *Wright, M.G., Au, M., Honsberger, D.

Name of conference: Entomological Society of America/Entomological Society of Canada joint meeting.

Date of Presentation: November 2022.

Title: Factors influencing establishment success of predator and parasitoid biological control introductions in Hawaii.

Authors: *Au, M., Wright, M.G.

Name of conference: Entomological Society of America/Entomological society of Canada joint meeting.

Date of Presentation: November 2022.

Title: Establishment, pest status, and management of the twolined spittlebug, *Prosapia bicincta*, in Hawaii.

Authors: *Wilson, S., Thorne, M., Peck, D., Wright, M.G.

Name of conference: Entomological Society of America/Entomological society of Canada joint meeting.

Date of Presentation: November 2022.

Title: Recent updates on Scoltinae biocontrol in Hawaii.

Authors: *Wright, M.G., Honsberger, D.

Name of conference: Entomological Society of America Pacific Branch meeting.

Date of Presentation: April 2021.

Title: Biology and distribution of Ramie moth in Hawaii, and impacts on native mamaki plants.

Authors; *Au., M.G., Wright, M.G.

Name of conference: Entomological Society of America Annual meeting.

Date of Presentation: November 2021

Title: Avocado lace bug – brief overview.

Authors: Wright, M.G.

Name of conference: Hawaii Tropical fruit Growers Association Conference.

Date of presentation: October 2021.

Title: Response of African elephants to bee alarm pheromones.

Authors; *Wright, M.G., Allin, P., Spencer, C., Mafra-Neto, A.

Name of conference: Southern African Wildlife management Association Conference.

Date of Presentation: August 2021

Title: Pest status and classical biological control of Scolytinae pests of coffee in Hawaii.

Authors: *Wright, M.G., Follet, P., Youssef, F., Honsberger, D., Gillette, C.P.D.T.

Name of Conference: Entomological Society of America Annual meeting.

Date of Presentation: November 2020

Title: New pest alert! Ramie moth (*Arcte coerulea*, Noctuidae) in Hawaii.

Authors: *Au, M.G., Wright, M.G.

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Name of Conference: Entomological Society of America Annual meeting.
Date of Presentation: November 2020

Title: Semiochemical repellants in pest management.

Authors: *Mafra-Neto, A., Wright, M.G., Fettig, C., Borges, R., Agnello, A.M., Martini, X.

Name of Conference: Entomological Society of America Annual meeting.

Date of Presentation: November 2020

Title: Establishment and pest status of the twolined spittlebug, *Prosapia bicincta*, in Hawai'i.

Authors: *Wilson, S.M., Wright, M.G, Thome, M., Peck, D.C.

Name of Conference: Entomological Society of America Annual meeting.

Date of Presentation: November 2020

Title: New parasitoids of bark beetles (Curculionidae; Scolytinae) and their life histories in Hawaii.

Authors: * Wright, M.G.

Name of Conference: Entomological Society of America Annual meeting.

Date of Presentation: November 2020

Title: Scale insects, mealybugs, lace bugs, and management options.

Authors: Messing, R.H., *Wright, M.G.

Name of Conference: 30th Annual International Tropical Fruit Growers Conference..

Date of Presentation: September 2020